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Bell Communications Research

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February 24, 1997

Mr. William F. Caton
Acting Secretary
Federal Communications Commission
1919 M Street, N.W.
Washington, D. C. 20554

Re: Implementation of Section 273 of the Communications Act of 1934 as amended by the Telecommunications Act of 1996, CC Docket No. 96-254

Dear Mr. Caton,

Pursuant to the Commission's Notice of Proposed Rulemkaing in the above-captioned proceeding, FCC 96-472 released December 11, 1996, please find enclosed an original and eleven copies (including copies for each Commissioner) for filing. In accordance with the Notice, four copies are being provided to the Secretary, Network Services Division, Common Carrier Bureau, 2000 M Street, N.W., Room 235, Washington, D. C. 20554, and one copy is being provided to the Commission's copy contractor, International Transcription Service, Inc. (ITS, Inc.), 2100 M Street, N.W., Suite 140, Washington, D. C. 20037.

Please stamp and return one copy to confirm your receipt. Please communicate with me if you have any questions concerning this matter. Thank you.

Sincerely,

Michael S. Slomin

Enclosures

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D. C. 20554

In the Matter of	)	
	)	
Implementation of Section 273 of the	)	CC Docket No. 96-254
Communications Act of 1934, as amended	)	
by the Telecommunications Act of 1996	)	

COMMENTS OF BELL COMMUNICATIONS RESEARCH, INC.

Bell Communications Research, Inc.
445 South Street
Morristown, New Jersey 07960

By:
Joseph A. Klein
Michael S. Slomin
Louise M. Tucker

Its Attorneys

February 24, 1997

SUMMARY OF COMMENTS

In its comments, Bell Communications Research, Inc. ("Bellcore") notes that, as the Notice acknowledges, the Bell Operating Companies are in the process of selling Bellcore. After the sale, Bellcore will be no different than other independently-owned providers of professional services and other independently-owned sources of the standards-related and certification services at issue in this proceeding, and therefore should not be treated differently than these other sources in terms of the application of Section 273(d) to its activities. That is what Section 273(d) requires, and that is what is appropriate.

Bellcore's services have been valuable to its owners and clients in the past, and to the industry generally, a view that has been recognized by the Commission. Bellcore's generic requirements and certification activities have promoted competition and multi-vendor supply of products and services, while retaining needed interoperability and compatibility. Bellcore currently plans to provide comparable services in the future, but Bellcore's ability to provide them will depend on the attractiveness of Bellcore's offerings, and this will depend, in large measure, on it not being artificially hobbled or treated differently than its competitors.

In Section 273 Congress acknowledged the potential of a Bellcore sale, and the change in Bellcore's status that would occur upon sale, by phrasing limited and precisely targeted provisions addressing certain standards development and certification activities of a sold Bellcore – and of other entities engaged in similar activities. The only provisions in Section 273 that are unique to Bellcore are in Section 273(d)(1). Other

provisions, addressing proprietary information, certification by entities that manufacture, and development of standards and generic requirements by non-accredited standards development organizations, each address "any" entity performing such activities. There is no reason or statutory basis for singling Bellcore out, or for seeking to impose additional regulation on Bellcore beyond those limited provisions.

In Bellcore's view, it is inappropriate and unnecessary to broadly inquire into the pending sale to Science Applications International Corporation ("SAIC") for two reasons: (1) as noted the statute anticipates a Bellcore sale; and (2) the Bellcore sale has no relevance to the matters at issue in this Section 273 proceeding (other than the manufacturing limitation that applies to Bellcore until it is sold), because those matters depend on the activities involved, not the identity or ownership of the entity performing such activities.

The Notice proposes that certain information be disclosed. Bellcore urges the Commission to recognize that valuable proprietary information may be implicated by such disclosure, and that the proprietary nature of such information must be protected to preserve its value and to preserve incentives to fund and engage in innovation. The Commission should resist attempts to free ride on innovation and development by others that may be made in the name of "full disclosure" and the like. Bellcore recommends that the Commission limit disclosure to achievement of the statutory purposes, and that it permit parties to negotiate appropriately structured non-disclosure agreements.

Bellcore notes that standards in general promote competition and interoperability in telecommunications, and that Bellcore's generic requirements and technical analysis

activities in particular have promoted competition and trade. We emphasize that Bellcore has not monopolized or attempted to monopolize standards development or certification, that we will not do so in the future, and that there is no need for the Commission to seek to establish new categories of *per se* monopolization.

We urge the Commission not to treat research as a form of collaboration under the statute, and to maintain incentives for continued funding of research and innovation.

Bellcore believes that the statute allows it flexibility in establishing an affiliate that maintains the required separation between manufacturing and certification. The statute requires such an affiliate if Bellcore or other entities seek to manufacture equipment in the same "class" as they have certified during the previous eighteen months. Bellcore has included in this filing a list of equipment classes suggested for this purpose.

Bellcore urges the Commission to condemn only pernicious discrimination that confers a competitive advantage on certifying entities and non-accredited standards development organizations, and not all distinctions in treatment.

Bellcore is troubled that the Commission would suggest that we would improperly seek to circumvent the statutory plan by placing improper labels on generic requirement development. Congress decided that not all generic requirement development efforts are to invoke the statutory requirements, only those that are "industry-wide" as defined in the statute. If a given generic requirement development effort is not within that definition, it is not improper if an inapposite statutory plan is not applied to that effort.

Bellcore responds to the request in the Notice for comment on modification (by supporting the Commission's proposal) and information dissemination (by

recommending that the Commission not tie disclosure to particular means, formats or technologies). Bellcore strongly supports the Commission's determination in last year's Dispute Resolution proceeding that a "funding party" is one that helps pay the costs of development of standards and generic requirements by providing funds (and not technical contributions or performance bonds), and urges the Commission not to revisit that determination. Nothing has changed since last year to warrant any modification.

Bellcore explains that the procedures it uses when performing its certification activities vary. In some cases, well known textbook test procedures are employed. In others, and particularly where complex equipment and/or cutting-edge technologies are involved, a certifying entity may have developed, at considerable expense, valuable and proprietary techniques. Such techniques cannot be disclosed in an unrestricted manner without destroying their value. For this reason, we urge the Commission to equate the statutory requirement that certification be performed using "published" techniques with fixed in print, and not necessarily publicly available.

Bellcore urges the Commission not to require that Bellcore have lost standards development or certification business to a competitor before the statutory sunset provisions can be effective. Rather, the statute should be interpreted as requiring sunset if another entity is engaged in analogous work and it has the capability of doing what Bellcore is doing. Thus, if it can be demonstrated that another entity is capable of developing comparable standards or generic requirements addressing the same subject matter as Bellcore's standards and generic requirements, this should be sufficient to

invoke the sunset provisions as to that activity. Similarly, if another entity is capable of performing certification of the same or similar telecommunications equipment and/or customer premises equipment, this should be sufficient.

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COMMENTS OF BELL COMMUNICATIONS RESEARCH, INC. IN RESPONSE TO NOTICE OF PROPOSED RULEMAKING

To: The Commission

I. INTRODUCTION

In its Notice of Proposed Rulemaking ("NPRM" or "Notice") in this proceeding, the Commission is seeking comment on a number of issues related to activities of Bell Communications Research, Inc. ("Bellcore"), insofar as they are impacted by Section 273 of the Telecommunications Act of 1996 ("Act"). Bellcore hereby files its comments on those issues.

Bellcore's current owners, the Regional Companies, are in the process of selling their Bellcore interests to Science Applications International Corporation ("SAIC"), after which Bellcore will no longer be affiliated with a Bell Operating Company. After the sale, Bellcore will be no different than other independently-owned providers of professional services and other independently-owned sources of the standards-related and certification services at issue in this proceeding, and therefore should not be treated differently than these other sources in terms of the application of Section 273(d) to its activities. Bellcore's services have been valuable to its owners and clients in the past, and to the industry generally, a view that has been recognized by

the Commission.[1] Bellcore currently plans to provide comparable services in the future, but Bellcore's ability to provide them will depend on the attractiveness of Bellcore's offerings, which will depend, in large measure, on it not being artificially hobbled or treated differently than its competitors. We urge the Commission not to do so.

As the Commission knows, Bellcore was established in late 1983 to provide applied research, engineering, software development and related services to the Regional Companies that currently own it. Initially, such services were provided only to Bell Operating Companies (hereafter, "BOCs"), Southern New England Telephone Company and Cincinnati Bell, Incorporated. Gradually, Bellcore began to provide services to others as it received authorization to do so pursuant to the Modification of Final Judgment and from its owner companies.[2] Among the services that Bellcore currently offers to its clients are two that are germane to this proceeding: (1) development of generic requirements,[3] and (2) technical analysis of systems and equipment.[4] Bellcore customers consider it a major advantage that Bellcore provides its services

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[1] *Increased Interconnection Task Group II Report,* Network Reliability Council, Jan. 14, 1996, at 20-21 and Fig. 4-7 ("data indicates a high reliance by the industry on Bellcore TRs/GRs [Technical References and Generic Requirements]"); *Interoperability: The Foundation of Competition,* Apr. 18, 1996 speech by FCC Chairman Reed Hundt (praising Bellcore's leadership in promoting interoperability).

[2] Bellcore currently serves more than 800 customers in the United States and worldwide.

[3] In certain sections Section 273(d) addresses establishment of "industry-wide" standards and generic requirements for telecommunications equipment and customer premises equipment, with "industry-wide" defined as: (1) activities funded by or performed on behalf of local exchange carriers, (2) for use in providing wireline telephone exchange service, and (3) whose combined total of deployed access lines in the United States constitutes at least 30 percent of all access lines deployed by telecommunications carriers in the United States as of the date of enactment of the Telecommunications Act of 1996. The NPRM sometimes appears to use "standards" as a shorthand for both. However, the establishment of "standards" and the establishment of "generic requirements" involve two different processes.

[4] Section 273(d) also addresses "certification" of telecommunications equipment or customer premises equipment. The definition of certification as "any technical process whereby a

in a vendor-neutral manner, *i.e.*, without regard to the identity of the vendor(s) involved in Bellcore's generic requirements and technical analysis activities.

Generic requirements are one form of technical specifications that companies can refer to or use in their procurement activities and to which suppliers can conform, should they choose to do so. However, such specifications can and do come from a wide variety of sources in addition to Bellcore generic requirements, including purchasers' own specifications, standards of accredited and non-accredited standards-setting bodies, and suppliers' specifications.[5] In all such cases, the purchasers and suppliers are free to utilize, not utilize, or formulate and identify deviations from such specifications for their purposes as they wish, or to develop them themselves or obtain them from a variety of sources, and they do. Such specifications, regardless of type, have meaning only if purchasers and suppliers choose to use them.

Technical analysis involves analyzing and/or testing whether systems and equipment are consistent with identified technical criteria. Bellcore performs such analysis for service providers and other purchasers, and for vendors (manufacturers and other suppliers). In the latter case, it authorizes the vendors with which it contracts to inform potential purchasers of the results of the analysis, in a carefully circumscribed manner that preserves Bellcore's vendor neutrality. Comparable analysis and testing can be, and is, performed by a wide variety of other

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party determines whether a product, for use by more than one local exchange carrier, conforms with the specified requirements pertaining to such product," Section 273(d)(8)(D), would appear to include some of Bellcore's technical analysis activities.

[5] In many cases generic requirements complement industry standards by providing greater detail or by particularizing them to the specific circumstances of their users (rather than the general circumstances addressed by the standard). In other cases, generic requirements are a prelude to standards – they provide usable specifications that can be used while the standards development process proceeds.

entities, including purchasers themselves, vendors that certify the results of their own testing, independent testing laboratories and certification laboratories (*e.g.*, Underwriters' Laboratories).

Bellcore's services in both these areas have contributed significantly to the creation of an open, interoperable network infrastructure that has stimulated competition in the sources of supply of telecommunications equipment and customer premises equipment, without sacrificing network reliability and quality. The statutory provisions of Section 273(d) governing industry-wide generic requirements and certification activities must be interpreted and implemented equally for Bellcore and others providing comparable services, and in a manner that is not so restrictive as to undermine the incentives and ability of Bellcore, its clients, and other industry entities to conduct such activities in the future.

II. GENERAL POLICY ISSUES

Later, Bellcore responds in detail to the issues of the Notice that are relevant to Bellcore. Before doing so, however, we address the following policy issues comprehensively: (a) the limited nature of the regulation established under Section 273(d); (b) the Bellcore sale; (c) benefits of standards; and (d) difficulties associated with regulating proprietary information.

A. Limited Regulation Under Section 273(d).

In Section 273(d) of the Act, Congress acknowledged the likelihood of a sale of Bellcore, and it set forth special forms of regulation of certification and generic requirements/standards activities that might be performed by Bellcore after such a sale – and by other entities performing such activities. It should be emphasized that the only provisions in Section 273 that are unique to Bellcore are in Section 273(d)(1). Other provisions, addressing proprietary information,

certification by entities that manufacture, and development of standards and generic requirements by non-accredited standards development organizations, each address "any" entity performing such activities.

The Act recognizes that once Bellcore is sold it will be neither a common carrier nor affiliated with a common carrier,[6] that there will be no basis or reason to single Bellcore out or regulate it as a common carrier, and that it should be generally treated like its competitors. Thus, in Section 273(d) Congress fashioned limited and precisely targeted constraints to govern how Bellcore and other entities are to engage in certification and development of generic requirements/standards, and provided that:

- An entity that establishes standards or generic network requirements for telecommunications equipment or customer premises equipment (regardless of whether that entity is a non-accredited standards development organization, and whether the activity is "industry-wide"), or that certifies such equipment, must protect proprietary information.[7]

- An entity that certifies telecommunications equipment or customer premises equipment manufactured by a non-affiliate may only manufacture a particular class of such equipment for which it is undertaking or has undertaken, during the previous 18 months, certification activity for such class of equipment through a separate affiliate (with the nature and degree of separation defined by the Act).[8]

- An entity that certifies telecommunications equipment or customer premises equipment manufactured by a non-affiliate must, unless the parties funding and performing certification agree otherwise, perform certification pursuant to published and auditable criteria, and pursuant to available industry-accepted testing methods and standards where available.[9]

- A non-accredited standards development organization that develops industry-wide standards for telecommunications equipment or customer premises equipment must give public notice of its consideration of a proposed industry-wide standard, invite interested parties to fund and participate in such efforts, publish a text for comment by parties that have agreed to fund and

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[6] Section 273(d)(1).

[7] Section 273(d)(2).

[8] Section 273(d)(3)(A)-(B).

[9] Section 273(d)(4)(B).

participate in the efforts, provide these parties an opportunity to have their comments included in the final text of the standard on request, publish a final text, and utilize agreed-upon dispute resolution procedures or fall-back procedures specified by the FCC.

- An entity that certifies telecommunications equipment or customer premises equipment manufactured by a non-affiliate may not monopolize or attempt to monopolize the market for such services, nor preferentially treat its own telecommunications equipment or customer premises equipment (or that of an affiliate) over that of any other entity in establishing or publishing industry-wide standards for, or in certification of, such equipment.[10]

Section 273(f) clarifies that the foregoing special regulatory plan established for entities that are not affiliated with a Bell Operating Company is self-contained, addressed to their standards and certification activities only, and that Congress did not intend that the Commission regulate such activities under broader common carrier principles.[11]

Subsections (a), (b), (c) and (e) of Section 273 only address manufacturing-related activities of the BOCs and their affiliates, and will not apply to Bellcore after it is sold. One or

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[10] Section 273(d)(4)(C)-(D); Section 273(d)(3)(B)(i).

[11] Section 273(f) provides that "For the purposes of administering and enforcing the provisions of this section and the regulations prescribed thereunder, the Commission shall have the same authority, power, and functions with respect to any Bell operating company or any affiliate thereof as the Commission has in administering and enforcing the provisions of this title with respect to any common carrier subject to this Act" [emphasis added]. This provision confers authority on the Commission only with respect to a BOC or an affiliate thereof, and not on a non-affiliate (which will be Bellcore's status when it is sold, *see also,* Section 273(d)(1)). The related Section 273(g), which authorizes the Commission to prescribe additional rules and regulations "to carry out the provisions of this section, and otherwise to prevent discrimination and cross-subsidization in a BOC's dealings with its affiliate and with third parties," is similarly focused on the BOC. The substantive provisions of Section 273(d) can be enforced under the general enforcement provisions of the Act. However, the expressions of additional common carrier regulatory authority in Sections 273(f)-(g) in the case of a BOC or its affiliate imply that such authority is not to be exercised over others. *Expressio unius est exclusio alterius.* American Methyl Corp. v. EPA, 749 F.2d 826, 836 (D.C.Cir. 1984); Nat'l Petroleum Refiners Ass'n v. FTC, 482 F.2d 672 (D.C.Cir. 1973) *aff'd,* 415 U.S. 951 (1974). Thus, the direct response to the question posed in paragraph 78 of the Notice, whether the sale of Bellcore, as announced, creates a need for additional rules, is "no." There is neither a need nor a basis for such rules.

more BOCs may choose to request Bellcore to have a role in discharging their responsibilities under Section 273, but as a provider of services to them on a case-by-case basis, and not as an entity that is obligated to perform this task under Section 273.[12] Once Bellcore is sold it will be subject only to the subsection (d) provisions. Consistently with this, the Commission properly ruled in its *Accounting Safeguards* decision that upon consummation of the Bellcore sale, Bellcore will no longer be affiliated with a Bell Operating Company and therefore no longer subject to the Commission's general affiliate transaction rules and requirements.[13]

B. Sale to SAIC.

The Commission notes that the Regional Companies have announced their agreement to sell Bellcore to SAIC, an entity described by the Commission as a large defense contractor.[14] The Commission tentatively concludes that upon consummation of the sale, Bellcore will no longer be considered an affiliate, successor or assign of a Bell Operating Company, and that it will be permitted to begin manufacturing telecommunications equipment and customer premises equipment in accordance with Sections 273(d)(1)(B) and (d)(3).[15] The Commission seeks comment on these proposed conclusions.

Bellcore agrees that the tentative conclusions are correct, and that they are the only proper interpretation of Section 273(d)(1) of the Act. When the sale is consummated, Bellcore will not

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[12] For example, Bellcore may contract with one or more BOCs to provide information on protocols and technical requirements to be made available to satisfy a Bell Operating Company disclosure obligation under Section 273(c)(3).

[13] Accounting Safeguards Under the Telecommunications Act of 1996, FCC 96-490, Dec. 24, 1996, para. 212 n. 529. Of course, Bellcore will still be subject to the specific requirements on separation of certifying and manufacturing activities in Section 273(d).

[14] Notice, para. 35.

[15] *Id.*, para. 38.

be an affiliate of any Bell Operating Company and, as is specified in the statute, is neither to be considered a common carrier, nor a Bell Operating Company or successor or assign thereof.[16]

The Commission also invites comment on unstated "other implications of Bellcore's sale."[17] Bellcore strongly believes that it is inappropriate to broadly inquire into the sale for two reasons. First, the statute anticipates a Bellcore sale. In fashioning the language of Section 273(d)(1) addressing the status of a sold Bellcore, Congress expressly dealt with the effects of a sale resulting in a Bellcore that would no longer be affiliated with any Bell Operating Company, without inviting or requiring an inquiry into its nature.[18] And second, the Bellcore sale has no relevance to the matters at issue in this Section 273 proceeding (other than the manufacturing limitation that applies to Bellcore until it is sold).[19]

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[16] Section 273(d)(1) and (3).

[17] Notice, para. 38.

[18] Nor did Congress contemplate the adoption of additional rules as a result of a Bellcore sale, n. 11 *supra*.

[19] Moreover, the BOCs are likely to continue to desire many services that Bellcore has provided them since 1984, and they have chosen to sell Bellcore to SAIC, a firm that is neither a manufacturer of telecommunications and customer premises equipment, nor a telecommunications service provider, and that is committed to nurturing and maintaining Bellcore's vendor-neutral consulting and other capabilities. At the same time, it is in the interest of SAIC and Bellcore to provide needed services to the BOCs and to others. Thus, the natural incentives of the parties will cause benefits to flow to the telecommunications industry, with no need for government inquiry or intervention. A protracted inquiry could disrupt progress towards consummation of the sale with potentially deleterious effects on Bellcore and SAIC, but without any correlative benefit to the public.

C. Telecommunications Standards Are Beneficial.

In paragraphs 31-32 of the Notice and notes thereto, it is observed that standards can have undesirable effects. This may be true in isolated instances, but the benefits of and necessity for standards in the telecommunications industry, which is characterized by significant network externalities, and Bellcore's positive role in promoting those benefits, should not be ignored or minimized.

First, compatibility and interoperability are required for communications to operate among multiple networks and multiple forms of equipment[20] (a requirement that is recognized in Sections 251 and 256 of the Act). Standards and generic requirements provide a baseline for this. Such standardization is needed for effective interoperability and to make interconnected services convenient and valuable to its users.

The choice in telecommunications is not between standards and no standards. Rather, the choice is between reliance on proprietary standards driven by dominant suppliers, which effectively lock purchasers into those suppliers' own complementary products, or reliance on more open industry standards and generic requirements which enable purchasers to obtain workable and compatible products from multiple sources. The supply of telecommunications equipment, services and offerings from a diversity of sources has dramatically increased since the 1984 divestiture in no small measure because industry standards and Bellcore's generic

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[20] *See, e.g.*, Teece, David J., *Information Sharing, Innovation, and Antitrust,* 62 Antitrust L. J. Iss. 2 (Winter 1994) at 465, 473-77; Carlton, Dennis W. and Klamer, J. Mark, *The Need for Coordination Among Firms, with Special Reference to Network Industries,* 50 U. Chi. L. Rev. 446 (Spring, 1983).

requirements have helped provide a sufficient base of broadly accessible technical information to enable seamless interoperability in a multi-source competitive environment.

Second, standardization promotes competition by promoting fungibility. In the absence of standardization, users and service providers can be "locked in" to using a given manufacturer's products, or the costs of substitution can be so high as to make replacement untenable. Even with the Commission's network disclosure requirements, a proliferation of varying network specifications could hinder interconnection and constraint competition. Standardization not only enables replacement of products, but it also enables procurement of additional items of equipment from a variety of sources to address growth, without replacing existing plant. In the absence of standardization, such incrementally-procured products might not interoperate with existing plant, or costs associated with enabling them to do so might be prohibitive. Since the 1984 divestiture, Bellcore's contributions to accredited standards bodies and industry forums, and Bellcore's generic requirements, have promoted competitive supply in major telecommunications sectors.

And third, standardization creates economies that can result in lower costs, with savings that ultimately benefit users. Telecommunications is competitive, and there is every reason to anticipate that competitive pressures will drive prices toward costs, and cause such economies to be passed along to ratepayers and consumers.

D. Proper Treatment of Proprietary Information is Critical.

The separate treatment in the Notice of disclosure of proprietary information (paragraphs 18-30) and protection of such information (paragraph 39-42) highlights the difficulties of seeking to regulate treatment of such information too generally.

1. Information Disclosure Needs to Be Limited

Just as there can be benefits associated with disclosure of information (*i.e.*, promotion of competitive supply of telecommunications equipment and services), as the Notice properly observes, premature disclosure can be deleterious.[21] Similarly, disclosure of the wrong type of information can adversely affect innovation and create economically incorrect incentives. One of the benefits of competition is that competitors innovate in an attempt competitively to differentiate their offerings in the marketplace and/or to improve their efficiency. These innovations are often costly, particularly in telecommunications where they often are implemented in complex software, and are extremely valuable to the innovators (and/or those who fund them).

Bellcore, alike with other providers of consulting and research services to BOCs, has an interest in this. If a Bell Operating Company's innovations are forced to be made available to competitors who can then "free ride" on the innovation, this will create disincentives for BOCs to engage in and fund future innovation, undermining the very competitive benefits the Act seeks to achieve. In the short term this will adversely affect firms such as Bellcore who may be contracting to develop innovations; in the longer term it will adversely affect service providers, manufacturers and the public. The Commission can help alleviate this by: (1) clarifying that the only information that must be disclosed is that which is needed to access to a Bell Operating Company's facilities and services, and not additional information that could be used by competitors in formulating their own products and services; and (2) limiting the use of such information to the access purpose alone.

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[21] Para. 19 addresses premature disclosure, and misstatements of availability.

In this regard, the Commission should limit information disclosure to interface-related information alone. Section 273(c)(1) requires disclosure of protocols and technical requirements for connection with and use of exchange service. These are interface requirements, and generally do not reach the innards of the services and the equipments that form them. Thus, we agree with the Commission's proposal to limit disclosure to clear, conceptual demarcation points. Notice, paragraph 24. While definitions can be formulated for the terms "protocol" and "technical requirements," Notice, paragraph 18, it is more important that whatever definitions are arrived at distinguish those signals and functions that are externally visible at an external interface from those that are internal, and disclosure should only be required for those signals and functions necessary for interconnection. We urge the Commission to resist proposals that information disclosure go beyond this and, in particular, not to interpret "the most complete disclosure that is possible or practical," Notice, paragraph 24, as requiring disclosure beyond the interfaces.

Finally, there may be other reasons to limit information disclosure (by recipient or by type of information). For example, information may need to be protected to protect the integrity of carriers' operations or customer proprietary network information from invasion by "hackers" and other criminals.[22] This could arise in the context of disclosing interface and protocols information.

2. Suppliers' Proprietary Information Must be Protected

Section 273(d)(2) addresses the requirement that proprietary information disclosed to entities developing standards and generic requirements and entities performing certification be

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[22] The Act itself recognizes the importance of protecting the confidentiality of customer proprietary network information, Section 222.

protected.[23] A comparable requirement is phrased for information provided BOCs for procurement purposes, Section 273(e)(5). These are important, but other proprietary information of suppliers is also implicated by the Act.

The Act places an obligation on BOCs to disclose information, Section 273(c)(1). However, in many cases the information involved is the valuable trade secret property of, and proprietary to, these carriers' suppliers, and the BOCs may not have the right to disclose such information freely. It is important that this be recognized.

The designs of telecommunications products and software are carefully protected to retain their value, and especially from disclosure to competitors. Bell Operating Company purchasers of telecommunications products and software are provided access to such trade secret information, if at all, only pursuant to non-disclosure agreements that require the recipients to protect the information and that sharply limit their ability to disclose such information further.

Alike with other suppliers, Bellcore expects its valuable trade secrets and proprietary information to be protected. At minimum, where trade secret and proprietary information of a Bell Operating Company's supplier is to be disclosed, the supplier should have the right to require the recipient to enter a binding and judicially enforceable non-disclosure agreement with the supplier, requiring the recipient to protect the information and limiting its use solely to interfacing with a Bell Operating Company's services and facilities.

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[23] Although this provision applies to all standards development organizations, many standards development organizations will not accept proprietary information, on the theory that the resulting standards and the material underlying them should be freely available (usually for a fee, but without restriction). In contrast, to meet client needs, Bellcore's generic requirements in many cases are more product-specific than standards, and in such cases may need to be based on the proprietary information of one or more suppliers.

On the same note, Bellcore has developed efficient, robust and valuable proprietary testing techniques and procedures that are key to its activities promoting interoperability and network reliability. They are extremely valuable to Bellcore, and key to our certification business. Entities performing equipment certification should also have the same right to protect their valuable proprietary testing techniques using binding and judicially enforceable non-disclosure agreements if such techniques are to be disclosed.[24]

Even with appropriate non-disclosure agreements, difficult intellectual property issues will remain. Bellcore, for example, develops proprietary software interfaces between its software systems and those of other suppliers. The not insignificant expenses of enabling the interfacing of these systems are in some cases borne by the other supplier, and in others by the carrier(s) seeking to utilize the other supplier's software system in conjunction with Bellcore's. In some cases interface modules are created on both software systems, to enable efficient interfacing. The interfaces themselves are valuable to Bellcore and to the other supplier. If they are to be made available freely to competitors – of Bellcore or the other supplier – parties will have little incentive to fund creation of such interfaces in the future, with potential effect of diminishing carriers' ability to utilize competitive alternatives.[25]

3. Non-Disclosure Agreements Are Needed to Help Protect Proprietary Information

Companies often need access to one anothers' proprietary information in the course of their work, and the usual and customary way that access is provided is pursuant to an enforceable

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[24] *See infra,* section III.M. of these comments.

[25] This discussion assumes, *arguendo,* that the government has the authority to require disclosure of a supplier's proprietary information without this constituting a compensable taking, a doubtful proposition at best.

non-disclosure agreement.[26] There is nothing unique about certification or standards development activities that warrants special regulation of this by the FCC.[27] The companies supplying proprietary information to certifying and standards development bodies have every incentive to seek to enter adequate non-disclosure agreements, and Bellcore's experience since 1984 is that appropriate agreements can be negotiated, without regulatory intervention. We urge the Commission to treat non-disclosure agreements for purposes of Section 273 as it did for purposes of Section 251(c), *i.e.,* to permit their use and not to prescribe specific types of agreements.[28]

Nevertheless, if the Commission concludes that it should adopt rules in this area, we would recommend that the rules authorize the use of non-disclosure agreements that appropriately limit use of the information to the purposes addressed by the Act, and that, among

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[26] The *sine qua non* of proprietary and trade secret information is that it is, and must remain, secret. Once it is disclosed publicly, that value is lost. For that reason, non-disclosure agreements contain terms requiring continued protection of this information and limiting its use, and such agreements are enforceable via injunction. The Commission has recognized that there may be pro-competitive reasons for parties to entire into non-disclosure agreements in the analogous circumstances of Section 251(c), Second Report and Order, Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, CC Docket No. 96-98("Second Report"), FCC 96-333, released Aug. 8, 1996, at 110.

[27] As noted, *supra* n. 23, many standards development organizations will not accept proprietary information, on the theory that the resulting standards and the material underlying them should be freely available (usually for a fee, but without restriction). That is a choice that they should remain free to make. In contrast, to meet client needs, Bellcore's generic requirements in many cases are more product-specific than standards, and in such cases may need to be based on the proprietary information of one or more suppliers. Similarly, the nature of Bellcore's technical analysis commonly involves access to a supplier's proprietary information. Suppliers providing proprietary information to Bellcore for these purposes have always required that appropriate non-disclosure agreements govern its protection and subsequent use. Indeed, access to proprietary information by Bellcore and the larger telecommunications suppliers is so common that blanket or master non-disclosure agreements have been entered into with such suppliers.

[28] Second Report, *supra,* n. 26.

their other terms, include the following provisions, which are commonly employed in non-disclosure agreements:

- To be protected Information, proprietary information must be marked confidential by its provider ("Owning Party") if provided in written form, and any disclosure made orally must be identified as confidential at the time of disclosure thereof and reduced to a writing that is marked confidential and provided to the recipient within fifteen (15) days of such disclosure.

- The recipient shall have no obligation to preserve the confidential nature of any Information it can demonstrate: (1) was previously known to the Recipient Party free of any obligation to keep confidential and free of any restriction on use and disclosure; or (2) is received from third persons without restrictions on use and disclosure and without breach of any agreement with Owning Party; or (3) is disclosed to third persons by the Owning Party without restrictions on use and disclosure; or (4) is or becomes publicly available by authorized disclosure by the Owning Party and without any restrictions on use and disclosure; or (5) is independently developed by or for the Recipient Party; or (6) is approved for release by written authorization of the Owning Party; or (7) is required to be disclosed pursuant to applicable law, regulation or court order, provided that Recipient Party will use reasonable efforts to afford Owning Party an opportunity to seek to limit or restrict such disclosure or to obtain appropriate protective/secrecy orders with respect thereto.

- Any enforcement and remedial procedures that the FCC may establish are in addition to the remedies and associated procedures the parties to a non-disclosure agreement may agree to (*e.g.*, injunctive relief, damages, forum, jurisdiction, venue, etc.).

The first principle minimizes disagreements on what information is to be protected by requiring a disclosing party to identify confidential information at the time of disclosure.[29] The requirement of written confirmation of disclosures made orally avoids later arguments by the parties to a discussion concerning what was or was not said. The second principle is consistent with trade secret law and, in particular, makes clear that a receiving party can independently develop the information it receives confidentially. The third principle assures that parties can

[29] It is also consistent with the language of Section 273(d)(2), requiring protection of proprietary information "designated as such by its owner."

continue to specify the remedies that they believe are appropriate to protection of their information, even if the FCC establishes new remedies or sanctions in its rules.[30]

III. DETAILED COMMENT ON THE ISSUES OF THE NOTICE

In this section of its comments, Bellcore comments in detail on the issues of the Notice that relate to Bellcore and its activities.

A. Implications on Negotiations Concerning Reduction of Trade Barriers (para. 7).

The Technical Barriers to Trade ("TBT") Agreement under the General Agreement on Tariffs and Trade ("GATT"), and Chapters 9 (standards-related) and 13 (telecommunications) of the North American Free Trade Agreement ("NAFTA"), call for governments to encourage use of international, regional and national standards, in that order. Some European vendors have, in the past (and incorrectly in our view), argued that Bellcore generic requirements and technical analysis have served as a barrier to sales by European manufacturers in United States markets.[31]

Contrary to this view, generic requirements and technical analysis have played a positive role in opening markets to competition, both by making available to new entrants information they need to interface compatibly with existing plant – information already possessed by the existing supplier(s) – and by providing exchange carriers a measure of assurance that equipments with which they may be unfamiliar will work in their networks.

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[30] It is vital that the parties be able to specify non-FCC remedies and enforcement provisions as the FCC may not have sufficient jurisdiction and enforcement authority over the variety of entities that might receive valuable proprietary information under Section 273 (and other sections of the Act) to provide meaningful remedies to providers of such information.

[31] *E.g.*, Regulatory Policies and International Telecommunications, 4 FCC Rcd. 7387, 7401-03 (1988).